

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2007/060560

A. CLASSIFICATION OF SUBJECT MATTER

A61K31/47(2006.01)i, A61P1/00(2006.01)i, A61P5/18(2006.01)i, A61P35/00(2006.01)i, C12Q1/02(2006.01)i, C12Q1/68(2006.01)i, C07D215/22(2006.01)n

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

A61K31/47, A61P1/00, A61P5/18, A61P35/00, C12Q1/02, C12Q1/68, C07D215/22

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Jitsuyo Shinan Koho 1922-1996 Jitsuyo Shinan Toroku Koho 1996-2007
Kokai Jitsuyo Shinan Koho 1971-2007 Toroku Jitsuyo Shinan Koho 1994-2007

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

BIOSIS (STN), Caplus (STN), EMBASE (STN), MEDLINE (STN), REGISTRY (STN)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	JP 2006-508981 A (Sugen, Inc.), 16 March, 2006 (16.03.06), Full text; particularly, Claims 1, 9, 13 & WO 2004/045523 A2 & US 2004/152759 A1	17-20, 37-40, 57-60, 68, 70, 72, 74, 76, 78, 80
A	& NO 200502578 A & EP 1562600 A2 & BR 200315630 A & TW 200418837 A & CN 1711089 A & KR 2005086594 A & ZA 200503841 A	97
X	WO 2002/32872 A1 (Eisai Co., Ltd.), 25 April, 2002 (25.04.02), Full text; particularly, Claims; examples & AU 200195986 A & NO 200301731 A	73, 75, 77 1-16, 18-36, 38-56, 58-60, 67, 69, 71, 79
Y	& KR 2003040552 A & JP 2002-536056 A & US 2004/053908 A1 & EP 1415987 A1 & CN 1478078 A & ZA 200303567 A	81-104
A		

☒ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

09 July, 2007 (09.07.07)

Date of mailing of the international search report

11 September, 2007 (11.09.07)

Name and mailing address of the ISA/
Japanese Patent Office

Authorized officer

Facsimile No.

Telephone No.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2007/060560

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y A	JP 2002-536414 A (Astra Zeneca AB.), 29 October, 2002 (29.10.02), Full text; particularly, Claims; examples & WO 2000/47212 A1 & AU 200024475 A & NO 200103882 A & EP 1154774 A1 & KR 2001102044 A & CN 1346271 A & US 2006/004017 A1	74,76,78 17-20,37-40, 57-60,68,70, 72,80 97
X Y A	JP 2003-012668 A (Kirin Brewery Co., Ltd.), 15 January, 2003 (15.01.03), Full text; particularly, Claims; examples & WO 2002/88110 A1 & US 2003/087907 A1 & NO 200304595 A & EP 1382604 A1 & KR 2004015143 A & ZA 200307861 A & CN 1543459 A	74,76,78 17-20,37-40, 57-60,68,70, 72,80 97
Y	WO 2004/078144 A2 (CELGENE CORP.), 16 September, 2004 (16.09.04), Full text; particularly, page 88, line 30 to page 82, line 28 & JP 2006-519874 A & US 2005/014727 A1 & EP 1603864 A2 & BR 200408005 A & KR 2005117533 A & CN 1780811 A & ZA 200507321 A	1-60,67-72, 79,80
Y	WO 2005/056764 A2 (COMPOUND THERAPEUTICS, INC.), 25 June, 2005 (25.06.05), Full text; particularly, page 47, line 29 to page 48, line 22 & JP 2007-516707 A & EP 1711196 A2 & AU 2004296376 A & BR 200417302 A	1-60,67-72, 79,80
Y	JP 2003-525595 A (Curagen Corp.), 02 September, 2003 (02.09.03), Full text; particularly, Par. Nos. [0202] to [0208] & WO 2001/32926 A2 & AU 200114493 A & EP 1287161 A2	1-60,67-72, 79,80
P,X	KIM, Dong Wook et al., An orally administered multitarget tyrosine kinase inhibitor, SU11248, is a novel potent inhibitor of thyroid oncogenic RET/Papillary thyroid cancer kinases, Journal of Clinical Endocrinology and Metabolism, 2006.10, Vol.91, No.10, p.4070-4076	17-20,37-40, 57-60,68,70, 72,74,76,78, 80,97

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Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.: 61-66

because they relate to subject matter not required to be searched by this Authority, namely:

Claims 61 to 66 pertain to methods for treatment of the human body by therapy and thus relate to a subject matter which this International Searching Authority is not required, under the provisions of the PCT Rule 39.1(iv), to search.

2. ☐ Claims Nos.:

because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. ☐ Claims Nos.:

because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest
the

☐ The additional search fees were accompanied by the applicant's protest and, where applicable, payment of a protest fee..

☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.

A. 発明の属する分野の分類 (国際特許分類 (I P C))

Int.Cl. A61K31/47 (2006.01)i, A61P1/00 (2006.01)i, A61P5/18 (2006.01)i, A61P35/00 (2006.01)i, C12Q1/02 (2006.01)i, C12Q1/68 (2006.01)i, C07D215/22 (2006.01)n

B. 調査を行った分野

調査を行った最小限資料 (国際特許分類 (I P C))

Int.Cl. A61K31/47, A61P1/00, A61P5/18, A61P35/00, C12Q1/02, C12Q1/68, C07D215/22

最小限資料以外の資料で調査を行った分野に含まれるもの

日本国実用新案公報	1 9 2 2 - 1 9 9 6 年
日本国公開実用新案公報	1 9 7 1 - 2 0 0 7 年
日本国実用新案登録公報	1 9 9 6 - 2 0 0 7 年
日本国登録実用新案公報	1 9 9 4 - 2 0 0 7 年

国際調査で使用した電子データベース (データベースの名称、調査に使用した用語)

BIOSIS (STN), C Aplus (STN), EMBASE (STN), MEDLINE (STN), REGISTRY (STN)

C. 関連すると認められる文献

引用文献の カテゴリー*	引用文献名 及び一部の箇所が関連するときは、その関連する箇所の表示	関連する 請求の範囲の番号
X	JP 2006-508981 A (スーージェン・インコーポレーテッド) 2006.03.16 全文、特に、請求項 1、9、13 参照 & WO 2004/045523 A2 & US 2004/152759 A1 & NO 200502578 A & EP 1562600 A2 & BR 200315630 A & TW 200418837 A	17-20, 37-40, 57-60, 68, 70, 72, 74, 76, 78, 80
A	& CN 1711089 A & KR 2005086594 A & ZA 200503841 A	97

☒ C 欄の続きにも文献が列挙されている。

☐ パテントファミリーに関する別紙を参照。

* 引用文献のカテゴリー

「A」特に関連のある文献ではなく、一般的技術水準を示すもの
「E」国際出願日前の出願または特許であるが、国際出願日以後に公表されたもの
「L」優先権主張に疑義を提起する文献又は他の文献の発行日若しくは他の特別な理由を確立するために引用する文献 (理由を付す)
「O」口頭による開示、使用、展示等に言及する文献
「P」国際出願日前で、かつ優先権の主張の基礎となる出願

の日の後に公表された文献

「T」国際出願日又は優先日後に公表された文献であって出願と矛盾するものではなく、発明の原理又は理論の理解のために引用するもの
「X」特に関連のある文献であって、当該文献のみで発明の新規性又は進歩性がないと考えられるもの
「Y」特に関連のある文献であって、当該文献と他の 1 以上の文献との、当業者にとって自明である組合せによって進歩性がないと考えられるもの
「&」同一パテントファミリー文献

国際調査を完了した日

0 9 . 0 7 . 2 0 0 7

国際調査報告の発送日

1 1 . 0 9 . 2 0 0 7

国際調査機関の名称及びあて先

日本国特許庁 (I S A / J P)

郵便番号 1 0 0 - 8 9 1 5

東京都千代田区霞が関三丁目 4 番 3 号

特許庁審査官 (権限のある職員)

榎本 佳予子

電話番号 0 3 - 3 5 8 1 - 1 1 0 1 内線 3 4 9 2

4 P

9 6 3 8

C (続き) . 関連すると認められる文献		
引用文献の カテゴリー*	引用文献名 及び一部の箇所が関連するときは、その関連する箇所の表示	関連する 請求の範囲の番号
X Y A	WO 2002/32872 A1 (エーザイ株式会社) 2002. 04. 25 全文、特に、特許請求の範囲、実施例参照 & AU 200195986 A & NO 200301731 A & KR 2003040552 A & JP 2002-536056 A & US 2004/053908 A1 & EP 1415987 A1 & CN 1478078 A & ZA 200303567 A	73, 75, 77 1-16, 18-36, 38-56, 58-60, 67, 69, 71, 79 81-104
X Y A	JP 2002-536414 A (アストラゼネカ アクチボラグ) 2002. 10. 29 全文、特に、特許請求の範囲、実施例参照 & WO 2000/47212 A1 & AU 200024475 A & NO 200103882 A & EP 1154774 A1 & KR 2001102044 A & CN 1346271 A & US 2006/004017 A1	74, 76, 78 17-20, 37-40, 57-60, 68, 70, 72, 80 97
X Y A	JP 2003-012668 A (麒麟麦酒株式会社) 2003. 01. 15 全文、特に、特許請求の範囲、実施例参照 & WO 2002/88110 A1 & US 2003/087907 A1 & NO 200304595 A & EP 1382604 A1 & KR 2004015143 A & ZA 200307861 A & CN 1543459 A	74, 76, 78 17-20, 37-40, 57-60, 68, 70, 72, 80 97
Y	WO 2004/078144 A2 (CELGENE CORPORATION) 2004. 09. 16 全文、特に、第 8 8 頁 3 0 行～第 8 2 頁 2 8 行参照 & JP 2006-519874 A & US 2005/014727 A1 & EP 1603864 A2 & BR 200408005 A & KR 2005117533 A & CN 1780811 A & ZA 200507321 A	1-60, 67-72, 79, 80
Y	WO 2005/056764 A2 (COMPOUND THERAPEUTICS, INC.) 2005. 06. 25 全文、特に、第 4 7 頁 2 9 行～第 4 8 頁 2 2 行参照 & JP 2007-516707 A & EP 1711196 A2 & AU 2004296376 A & BR 200417302 A	1-60, 67-72, 79, 80
Y	JP 2003-525595 A (キュラゲン コーポレイション) 2003. 09. 02 全文、特に、段落【0202】～【0208】参照 & WO 2001/32926 A2 & AU 200114493 A & EP 1287161 A2	1-60, 67-72, 79, 80
PX	KIM, Dong Wook et al., An orally administered multitarget tyrosine kinase inhibitor, SU11248, is a novel potent inhibitor of thyroid oncogenic RET/Papillary thyroid cancer kinases, Journal of Clinical Endocrinology and Metabolism, 2006. 10, Vol. 91, No. 10, p. 4070-4076	17-20, 37-40, 57-60, 68, 70, 72, 74, 76, 78, 80, 97

